Amendments to the Specification:

Please amend the specification as indicated below, wherein deleted language is noted by double brackets and/or strikethrough font and additional language is underlined:

Replace the paragraph on page 9, line 5 through page 11, line 21, with the following paragraph:

A hydrodynamic bearing in accordance with another aspect of the present invention comprises a sleeve having a bearing hole at the nearly central portion thereof, a shaft rotatably inserted into the bearing hole of the above-mentioned sleeve, and a nearly disc-shaped flange, secured to one end of the above-mentioned shaft, one face of which is opposed to the end face of the sleeve 1 and the other face of which is opposed to a thrust plate provided to hermetically seal a region including the above-mentioned end face of the above-mentioned sleeve, wherein herringbone-shaped first and second dynamic pressure generation grooves are provided on at least one of the inner circumferential face of the above-mentioned sleeve and the outer circumferential face of the above-mentioned shaft, among the above-mentioned first and second dynamic pressure generation grooves, when the grooves away from the above-mentioned thrust plate are designated as the first dynamic pressure generation grooves and the grooves close thereto are designated as the second dynamic pressure generation grooves, the first length L1 of the groove portion, away from the above-mentioned thrust plate, of the above-mentioned herringbone-shaped first dynamic pressure generation groove in the direction of the shaft is larger than the second length L2 of the groove portion close to the above-mentioned thrust plate in the direction of the shaft, the above-mentioned herringbone-shaped second dynamic pressure generation groove is made symmetric with respect to a line passing through the herringbone-shaped turn-back parts, the value of a calculation expression, $(L1 + L2)/(2 \times L2)$ represented by using the above-mentioned first length L1 and the above-mentioned second length L2, is in the range of 1.02 to 1.60, herringbone-shaped third dynamic pressure generation grooves are provided

on at least one of the opposed faces of the flange and the thrust plate, the above-mentioned first, second and third dynamic pressure generation grooves are supplied with oil having a kinematic viscosity of 4 cSt or more at 40°C of temperature, one of the above-mentioned sleeve and the above-mentioned shaft is secured to a base and the other is secured to a rotatable hub rotor, and when the outside diameter of the herringbone pattern of the above-mentioned third dynamic pressure generation groove is designated as d1o, the inside diameter thereof is designated as d1i, the diameter of the turn-back part thereof is designated as d1m, and the diameter of the turn-back part of the herring pattern, wherein the oil pressure generated by the above-mentioned third dynamic pressure generation grooves in the direction from the outer circumference to the inner circumference of the flange becomes equal to the oil pressure generated in the direction from the inner circumference to the outer circumference thereof, is designated as dsy and is represented by:

$$dsy = \{(d1i^2 + d1o^2)/2\}^{1/2},$$

the diameter d1m of the turn-back part is determined so that when the diameter of the above-mentioned shaft is in the range of 1 mm or more and 10 mm or less, the value obtained by subtracting the above-mentioned length L2 from the above-mentioned length L1 is set in the range of 0.05 mm or more and 1.5 mm or less, the diameter d1m is in the range of 1 mm or more and 10 mm or less, and the value obtained by subtracting the diameter d1m from the diameter dsy is in the range of 0.05 mm or more and 0.8 mm or less, that is, d1m = dsy $\underline{-}$ (0.05 to 0.8 mm)~~(Sic)~~.

Replace the paragraph on page 12, line 5 through line 18, with the following paragraph:

A disc rotation apparatus using the hydrodynamic bearing in accordance with the present invention records or reproduces signals, wherein a recording/reproduction disc is concentrically secured to the hub rotor of the hydrodynamic bearing in accordance with claims 1 to 5 and rotated, magnetic heads or optical heads are provided so as to be opposed to the faces of the above-

mentioned rotating disc, and the magnetic heads or optical heads are configured so as to be movable in parallel with the faces of the above-mentioned disc. By using the hydrodynamic bearing in accordance with the present invention, it is possible to obtain a disc rotation apparatus being high in ~~the~~ reliability like that of the bearing.

Replace the paragraph on page 15, line 23 through page 17, line 5, with the following paragraph:

A preferred embodiment of a hydrodynamic bearing in accordance with the present invention will be described below referring to FIGS. 1 to 10. FIG. 1 is a cross-sectional view of a hydrodynamic bearing in accordance with an embodiment of the present invention. In FIG. 1, a sleeve 1 has a bearing hole 20 at its nearly central portion, and herringbone-shaped dynamic pressure generation grooves 1A and 1B are formed on the inner circumferential face of the bearing hole 20. A recess portion 1C is formed at the lower end of the sleeve 1. A shaft 2 is rotatably inserted into the bearing hole 20. A flange 3 is secured to the lower end of the shaft 2 so as to be accommodated in the recess portion 1C at the lower end of the sleeve 1. A thrust plate 4 is secured to the recess portion 1C of the sleeve 1 by a securing method, such as laser welding, precision crimping or bonding, and the recess portion 1C including the flange 3 is hermetically sealed. The sleeve 1 is secured to a base 6. The shaft 2 is secured to a hub rotor 7. Dynamic pressure generation grooves are provided on one of the opposed faces of the flange 3 and the thrust plate 4. In FIG. 1, dynamic pressure generation grooves 3A are provided on the lower face of the flange 3. Dynamic pressure generation grooves 3B are also provided on the upper face of the flange 3 opposed to the recess portion 1C of the sleeve 1. The insides of the dynamic pressure generation grooves 1A, ~~2A(sic)~~ 1B, 3A and 3B are filled with oil or grease. A rotor magnet 9 is installed in the hub rotor 7. In addition, a stator 8 is installed on the base 6 so as to be opposed to the above-mentioned rotor magnet 9. Two discs

10, for example, are installed on the hub rotor 7 via a spacer 12. The discs 10 are secured by a clamper 11 installed on the shaft 2 by a screw 13.

Replace the paragraph on page 19, line 22 through page 20, line 16, with the following paragraph:

The vertical axis of the graph in FIG. 4 represents the oil pressure (pascal) in the dynamic pressure generation groove 3A, which is variable depending on the value of the diameter difference (dsy – d1m). If asymmetry is insufficient in the pressures inside the bearing, a partially negative pressure portion is generated somewhere inside the bearing, and air may be accumulated there. On the other hand, if asymmetry is excessive, the internal pressure becomes too high, and there arises a danger of causing cavitation or microbubbles. Relating to the hydrodynamic bearing in accordance with this embodiment, a hydrodynamic bearing is made by using transparent materials for the sake of observation, and experiments are carried out. As a result, it was found that when the value of the above-mentioned dsy – d1m was in the range of 0.05 or more to 0.99 or less, the amount of air bubbles entered and the amount of air coagulated during rotation were minimal, whereby this range was an appropriate range and air ~~was most hardly~~ is least likely to be accumulated in oil.